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(54) Title: DIRECT DETERMINATION OF CARBOHYDRATES, AMINO ACIDS AND ANTIBIOTICS BY MICROCHIP ELECTROPHORESIS WITH PULSED AMPEROMETRIC DETECTION

(57) Abstract: The present invention provides a microchip for performing electrophoresis with pulsed amperometric detection (PAD) for the separation and detection of underivatized carbohydrates, amino acids, sulfur-containing antibiotics, etc. PAD allows for the direct detection of amines, thiols, alcohols and carbohydrates and therefore is a useful technique for the development of electrochemical detection for microchip electrophoresis.